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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,044	03/21/2001	Gordon Taylor Davis	RAL920000083US1	3527

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EXAMINER

ODOM, CURTIS B

ART UNIT PAPER NUMBER

2634

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/814,044	Applicant(s) DAVIS ET AL.	
	Examiner Curtis B. Odom	Art Unit 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 7-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - a. On page 1, line 19-page 2, line 2, the phrase “in which full power physical frames including a control channel signal component and a data signal component or a control channel signal component and a low power synchronization signal component” is suggested to be changed to “in which full power physical frames include a control channel signal component and a data signal component and low power physical frames include a control channel signal component and a low power synchronization signal component”.
 - b. On page 5, line 11, the phrase “block 11when” is suggested to be changed to “block 11, when”.

Appropriate correction is required.

Claim Objections

2. Claims 4, 6, and 7-11 are objected to because of the following informalities:
 - a. In claim 4, line 3, the word “Generating” is suggested to be changed to “generating”.
 - b. Claim 6 is suggested to end with a period.

c. In claim 7, line 15, "DSLAM" is suggested to be changed to "Digital Subscriber Line Access Multiplexer".

d. In claim 7, line 16, "the modem" is suggested to be changed to "each modem".
Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Edem (U. S. Patent No. 5, 805, 597).

Regarding claim 1, Edem discloses A low power DSL modem transmitter (Fig. 8), suitable for incorporation in integrated DSL server line cards comprising:

first means for generating full power physical frames (Fig. 5, column 8, lines 7-47, Table 1) including a control channel signal component (wherein D channel and maintenance bits are control data components as disclosed in column 4, lines 24-38 and Fig. 4, block 62, column 7, lines 64-67) and a data channel signal (Ethernet data stream) component when the transmitter is provided with data to transmit; and,

second means for generating low power physical frames (Figs. 8 and 9, block 230, column 8, line 45-column 11, line 47) having a control channel signal component (column 9,

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lines 43-65, D and maintenance channel bits) when the transmitter has no data to transmit (column 8, line 45-column 9, line 6), and

third means (Fig. 8, block 210', column 10, lines 28-34) responsive to the second means for selecting the frames generated by the first and second means.

Regarding claim 2, which inherits the limitations of claim 1, Edem discloses the second means includes a low power synchronization signal in the generated low power physical frames (column 9, lines 43-65).

Regarding claim 3, which inherits the limitation of claim 2, Edem discloses the low power synchronization signal is an idle pattern (Abstract, column 3, lines 36-54, and column 9, lines 43-65), wherein the idle state is a pattern in the low power frame which allows recovery between data bursts and identification of a frame and thus, can be considered a synchronization signal.

Regarding claims 4-6, the claimed method includes features corresponding to the subject matter mentioned in the above rejection claims 1-3, which is applicable hereto.

Allowable Subject Matter

7. Claims 7-11 are allowable over prior art references (if above objections are overcome) because related references do not disclose a plurality of DSL modems configured to transmit a reduced power frame to maintain synchronization when there is no data to transmit; and controlling the power dissipated by the modems by calculating the power dissipated by the

modems periodically, comparing the calculated power to a predetermined value and reducing the total power dissipated by limiting the amount of transmitted data.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Vitenberg et al. (U. S. Patent No. 6, 351, 509) discloses reducing power consumption of DSL modems by calculating the power used by the modems and comparing the value to a predetermined value.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 703-305-4097. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Curtis Odom
July 22, 2004



STEPHEN CHIN
SUPERVISORY PATENT EXAMINE
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